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EXAMINER

GISHNOCK, NIKOLAI A

ART UNIT	PAPER NUMBER
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3714

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10/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/803,806

Applicant(s)

MARGGRAFF ET AL.

Examiner

Nikolai A. Gishnock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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DETAILED ACTION

In response to Applicant's remarks filed 7/27/2007, claims 1-36 are cancelled. Claims 37-72 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/27/2007 has been entered.

Drawings

2. The drawings filed 7/16/2004 are objected to under 37 CFR 1.84 because the lines, numbers, and letters in Figures 1-5 are not uniformly thick and well-defined, clean, durable and black; the solid black shading in Figure 6 and the half-tone shading in Figures 4, 5, 7, & 8 is difficult to reproduce; and Figure 2 requires a legend for elements A-D. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

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consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 37-40, 49-52, & 61-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverbrook et al. (US 6,678,499 B1), hereinafter known as Silverbrook.

5. Silverbrook discloses a computing device for providing instructional response, and a method and computer readable media for implementing a method, the media having computer readable code which when executed by a processor of a computing device cause the computing device to perform a method for providing instructional response (Instructional responses are further understood to be answers to questions, Silverbrook teaches a user responding to questions during an examination, 4:40-5:5; also at 45:61-48:6), comprising: an input device for accepting an unstructured user input (system includes a sensing device to convey data from the form to the computer system and to contribute additional data. The sensing device is configured

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as a pen, which is designed to be able to physically mark the interactive form as well as to selectively enable the coded data from the form to be read and transmitted to the computer system. The coded data then provides control information, configured such that designation thereof by a user causes instructions to be applied to the software running on the computer system or network, 3:58-4:2; unstructured user input is understood as such: A free response examination paper allows the input of numeric expressions, values or text. The system may employ text conversion to allow the system to evaluate the response automatically, and unrecognized input can be routed to an examiner or administrator, 4:66-5:3) by reading a plurality of substantially invisible codes, wherein said plurality of substantially invisible codes are printed on a surface (the form is disposed on sheet material such as paper or the like which has the coded data printed on it and which allows interaction with the computer system. The coded data is detectable preferably, but not exclusively, outside the visible spectrum, thereby enabling it to be machine-readable but substantially invisible to the human eye, 3:45-57); a processor for processing said user input (The pen controller chip includes a controlling processor. {The} bus enables the exchange of data between components of the controller chip, 40:51-54), wherein said processing comprises: recognizing a plurality of print elements associated with said plurality of substantially invisible codes (The controlling processor captures and decodes location data from tags from the surface via the image sensor, 40:62-64); and in response to said recognizing, determining said instructional response (the present invention provides a method of enabling examinations, including the steps of: providing a user involved in an examination exercise with an exercise form containing coded data indicative of an identity of the exercise form and of at least one reference point of the exercise form; receiving, in a computer system, response data from a sensing device operable by said user, said data regarding the identity of the exercise form and a position of the sensing device relative to the exercise form,

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the sensing device, when placed in an operative position relative to the exercise form, sensing the coded data and providing said response data from said coded data, 2:13-25; also, for each examination question, an examinee may give an answer. Each multiple-choice answer contains the chosen option number and the time the answer was written. Each essay answer has the essay content. The essay answer is handwritten by the user and is stored as digital ink, and optionally the writing may be converted to text using handwriting recognition. Each answer may have associated with it a score and a comment, 46:31-39; and an output device (net page printer, 41:51-42:52) for outputting said instructional response (Multiple choice questions can be automatically marked by the examination application. If a completed examination is printed by a marker, extra fields can optionally be printed for essay style questions to allow the marker to enter the score and comments against the answer, 48:1-6) [Claims 37, 49, & 61].

6. Silverbrook discloses wherein the unstructured user input comprises a print element created by the user on said surface (the sensing device is configured as a pen, which is designed to be able to physically mark the interactive form as well as to selectively enable the coded data from the form to be read and transmitted to the computer system, 3:58-4:2; also, the netpage pen operates both as a normal marking ink pen and as a non-marking stylus, 41-43) [Claims 38, 50, & 62].

7. Silverbrook discloses a writing element (an ink pen cartridge with nib and a stylus with stylus nib are mounted side by side within the housing. Either the ink cartridge nib or the stylus nib can be brought forward through open end of the metal end piece, by rotation of the pen top, 39:36-42) [Claims 39, 51, & 63].

8. Silverbrook discloses a stylus having an optical detector for detecting said plurality of substantially invisible codes printed on said surface, and a processor coupled to the optical detector (A second flex PCB, is mounted on an electronics chassis which sits within the

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housing. The second flex PCB mounts an infrared LED for providing infrared radiation for projection onto the surface. An image sensor is provided mounted on the second flex PCB for receiving-reflected radiation from the surface. The second flex PCB also mounts a radio frequency chip, which includes an RF transmitter and RF receiver, and a controller chip for controlling operation of the pen. An optics block sits within the cover, and projects an infrared beam onto the surface and receives images onto the image sensor, 39:60-40:4), and a memory unit (Flash memory and a 512 KB DRAM are also included, 40:51-54) comprising code for audio outputs corresponding to the print element (A document instance corresponds to a formatted document. It consists of a set of page instances, each of which corresponds to a page description of the formatted document. Each page instance describes a single unique printed netpage. A page instance has a background field, which is used to record any digital ink captured on the page, which does not apply to a specific input element. In the preferred form of the invention, a tag map is associated with each page instance to allow tags on the page to be translated into locations on the page. A page instance consists of a set of terminal element instances. Each formatted element has a spatial extent or zone on the page. This defines the active area of input elements such as hyperlinks and input fields. A terminal element can be a static element, {etc.} A static element can be an audio clip element with an associated audio clip object, {etc.}, 14:43-15:15; it is understood that the controlling processor captures and decodes {pen} location data from tags from the {page instance's} surface via the image sensor, 40:62-64, using the flash and DRAM memory unit, where the terminal element's location is associated with a tag, and the terminal element is associated with an audio clip object) [Claims 40, 52, & 64].

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 41-48, 53-60, & 65-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook, in view of Nagasaki et al. (US 5,896,403), hereinafter known as Nagasaki.

12. Silverbrook teaches all the features of claims 37-40, 49-52, & 61-64 as demonstrated above. Silverbrook teaches wherein the plurality of substantially invisible codes at a plurality of positions is operable to determine a location of a plurality of print elements on the surface (3:58-4:2) [Claims 45, 57, & 69]. Silverbrook teaches wherein the unstructured user input is a non-keyboard user input (handwritten input, 4:66-5:3; also at 46:31-39) [Claims 46, 58, & 70]. Silverbrook teaches a writing device (39:36-42) [Claims 48, 60, & 72], and wherein a surface is a writing surface (paper, 3:45-57) [Claims 44, 56, & 68]. Silverbrook teaches wherein the processor, input device, and writing device form a housing having a pen-like appearance (39:10-40:23) [Claims 48, 60, & 72].

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13. What Silverbrook fails to teach is wherein the output device is an audio output device [Claims 41, 53, & 65], wherein the output device is configured to generate an audio output related to a user created print element on said surface [Claims 44, 56, & 68], and wherein the output device, along with the elements of Silverbrook, form a housing having a pen-like appearance [Claims 48, 60, & 72]. However, Nagasaki teaches where sound data recorded on a paper sheet is read by a pen type information reproducing apparatus. The user traces the dot code with the pen type information reproducing apparatus to detect the dot code. Upon conversion of the dot code into a sound, the user can hear the sound through a speech output device such as an earphone. The overall information reproducing apparatus of this embodiment is housed in a portable pen type housing. Nagasaki further teaches a loudspeaker incorporated in the housing (9:60-10:8, see also Figures 2B & 3). The loudspeaker for reproducing and outputting sound information, based on a code printed on paper, as taught by Nagasaki, would be incorporated into the pen of Silverbrook for generating and outputting the audio clip tags associated with a user's writing, as taught by Silverbrook. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have an audio output device form a housing having a pen-like appearance, configured to generate an audio output related to a user created print element on said surface, as taught by Nagasaki, included in the pen housing having a processor, input device, and writing device, as in Silverbrook, wherein the writing surface has a plurality of substantially invisible codes on a paper writing surface, at a plurality of positions for determining is operable to determine a location of a plurality of print elements on the surface, in order to allow inexpensive, large-capacity recording and repetitive reproduction of multimedia information, including audio information, to be easily transmitted by a paper-printing apparatus, such as a fax machine or printer [Claims 41, 44, 48, 53, 56, 60, 65, 68, & 72].

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14. What Silverbrook further fails to teach is wherein a task is audibly presented to the user by the audio output device [Claims 42, 54, & 66], wherein the instructional response is an audio instructional response presented to the user by the audio output device [Claims 43, 55, & 67], and wherein the instructional response relates to a task presented to the user [Claims 47, 59, & 71]. However, Nagasaki teaches various applications of recording of audio information including teaching materials for foreign languages and language dictionaries, repair manuals, books and magazines such as picture books, guide books for travelers, fax (voice & fax) operation instructions, electronic blackboards, etc. (12:58-13:5). These various applications taught by Nagasaki are understood to audibly present a user with an instructional response in the form of a task, and would be used with the user input device of Silverbrook for accepting an unstructured written user input, recognizing a plurality of print elements, determining an instructional response, and outputting the response in an audio format. Nagasaki further teaches audio codes printed on a double-coated adhesive tape, such as a label, which peels off and is stuck on the lower surface of a roll of paper (12:58-13:5), wherein machine-readable codes are recorded in transparent ink on the upper surface of the paper (14:18-67). A required portion of the paper that can be cut and stuck on various things is understood to be a sticker. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the audio tag information in the pen of Silverbrook to convey an instructional response in the form of a task to a user, as taught by Nagasaki, in order to provide instructions to a user which can be faxed, listened to, and optionally read [Claims 42, 43, 47, 54, 55, 59, 66, 67, & 71].

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Response to Arguments

15. Applicant's arguments filed 7/27/2007, see pages 10-15, with respect to claims 37-72 have been considered, but are moot in view of the new ground(s) of rejection.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dougherty et al. (US 6,076,734) discloses an Internet data-linked book, globe, article or clothing, affixable templates, etc. that are scanned with a user's wand, and where the sensing wand may provide audio feedback, including sounding a buzzer if the information has null meaning. Silverbrook et al. (US 6,647,369) discloses an infra-red dot scanning system that plays an encoded audio signal embedded in a photograph using a user's handheld device. Stifelman, Lisa J. (*Augmenting Real-World Objects: A Paper-Based Audio Notebook*. 1993. Speech Research Group, MIT Media Laboratory, Cambridge MA) discloses an audio recording notebook that associates recorded audio clips of an instructor's voice with the corresponding handwritten notes of a user at the time of recording. The Tools of Progress. ([2001-06-19] [Retrieved 2001-06-19] [Retrieved from the Internet] <URL:http://www.anoto.com/print_page.asp?cid=22>) discloses a wireless pen that tracks the user's writing and conveys the data to a computer system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikolai A. Gishnock whose telephone number is 571-272-1420. The examiner can normally be reached on M-F 8:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/18/2007

Ronald Laneau

Ronald Laneau
Primary Examiner
Art Unit 3714

10/23/07